

In re SCHEID ET AL., Application No. 10/625,012  
Amendment A

### REMARKS

The Office action dated September 1, 2005, and the references cited have been fully considered. In response, please enter the following amendments and consider the following remarks. Reconsideration and/or further prosecution of the application is respectfully requested.

More specifically, and as well-known to one skilled in the art, as taught at least in FIGs. 2A-2C and 3A (and the corresponding discussion in the originally filed specification on pages 3 and 12-15), and as basically pointed out in the Office action on page 5, lines 5-7, a standard memory (e.g., RAM, CSRAM) receives an address and retrieves from memory a value from a location corresponding to the address a value; while a content addressable memory receives a search key (i.e., "lookup value") and compares each of its entries to the search key to identify one or more matching values, typically providing a single address of the highest priority matching entry (i.e., a priority encoder is used to identify the highest priority matching entry). Applicants admit that this basic lookup operation functionality of a memory device (i.e., receiving an address and retrieve a value at a location corresponding to the address) and of a content addressable memory (receiving a search key and identifying an address of the highest priority matching entry) is prior art and well-known in the art (as these are how these devices operate), and Applicants are not trying to claim this functionality. Rather, Applicants are claiming novel and nonobvious configurations, methods etc. using such devices and functionality.

Applicants have amended independent claims 1, 6, 11, and 15 herein to more clearly recite elements/limitations supported by the originally filed specification and neither taught nor suggested by the prior art of record; and claims 2 and 7 have been canceled as corresponding limitations have been added to their respective independent claims. More specifically, independent claim 1 is amended to recite a lookup value and a content addressable memory result that includes an address and that the record is retrieved from an adjunct memory at a position corresponding to the address, the record including a key value and a statistics value, comparing the key value to the first value; and in response to the key value matching the first

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value, updating the statistics value, with support at least at by as taught at by memory and content addressable memory devices, FIGs. 2A-2C and 3A (and the corresponding discussion in the originally filed specification on pages 3 and 12-15), and original claim 2 ("wherein the first content addressable memory result includes an address; and wherein said performing the operation includes: retrieving a record from memory, the record including a key value and a statistics value, comparing the key value to the first value, and updating the statistics value). Also, independent claim 11 is amended to include the limitation of "retrieving a record from an adjunct memory at a position corresponding to the address, the record including a key value and a statistics value, comparing the key value to the first value; and in response to the key value matching the first value, updating the statistics value," with support provided at least by process block 430 of FIG. 4B and described on pages 17-18 of the originally filed specification "the correct record (e.g., the key value matches the first value)". Independent claim 6 is similarly amended with additional support provided by original claim 7, which is canceled herein but originally depended directly from claim 6. Independent claims 11 and 15 are similarly amended. Claim 18 is also amended to correct a typographical error.

As to the claim rejections, in terms of the § 101 rejection, the specification is amended herein to clarify the description of computer-readable medium in accordance with the MPEP. No new matter is added with this amendment. Applicants therefore request the § 101 rejections be withdrawn.

In regards to the § 103 rejections of independent claims 1, 6, 11, and 15, the Office action relies on a teaching of Basu et al., US Patent Application Publication No. US 2004/0100950 for the teaching that hashing logic can be used to enable a hashing bucket (i.e., a set of associative memory entries) to be enabled for the next lookup logic. Such a configuration is not contemplated by the original disclosure of the present application, and amended claims 1, 6, 11, and 15 recite that their respective hashed value is included in the search key/lookup value based on which the lookup operation is performed (i.e., a content addressable memory receives a search key / lookup value, and compares each of its entries to the

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search key to identify typically a single address of the highest priority matching entry), which is patentably distinct from the enabling functionality taught by Basu et al. Additionally, claim 1's use of the address as recited in amended claim 1 is patentably distinct from the Office reliance on Ikeda et al., US 6,788,683 on page 5, lines 14-17 of the Office action. Moreover, there is no teaching nor suggestion in the prior art of record of comparing the key value to the first value, and in response to these two values matching, updating the statistics value as recited in amended claim 1. For at least these reasons, amended independent claims 1, 6, 11, and 15 (and their pending dependent claims of 3-5, 8-10, 12-14, and 16-18) are believed allowable. Therefore, after entering of the amendments, Applicants respectfully request the withdrawal of the rejections of claims 1, 3-6, and 8-18.

In regards to independent claims 19, 20, and 24, Applicants respectfully submit that the Office failed to address all the claim elements/limitations, and therefore request that the rejections of claims 19-27 be withdrawn. It is well-established law that the burden is on the Office to initially present a *prima facie* unpatentability (e.g., anticipation, obvious) rejection, before Applicant has any burden of proof of disproving any application of a cited reference against a claim. *In re Warner*, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (C.C.P.A. 1967); *Ex parte Skinner*, 2 USPQ2d 1788, 1788-89 (B.P.A.I. 1986). Moreover, obviousness under 35 USC § 103(a) requires "the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP § 706.02(j) (*citing In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991))(emphasis added). Applicants respectfully submit that for at least original claims 19-27, such an initial showing has not been done.

For example, claim 19 recites that masking logic is configured to mask the flow identification value (e.g., the lookup value used in performing the content addressable memory lookup operation) with the flow identification value mask (i.e., a value retrieved from the adjunct memory based on the result of the content addressable memory lookup operation).

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Applicants neither see where (1) a rejection for this limitation is presented in Office action, nor (2) where this is either taught or suggested by the prior art of record. Independent claim 20 also includes a similar limitation ("masking the flow identification value with the flow identification value mask to generate a masked flow identification value") with similar antecedent basis for these limitations in the claim 20; and claim 24 includes a similar limitation ("means for masking the flow identification value with the flow identification value mask to generate a masked flow identification value") with similar antecedent basis for these limitations in the claim 24.

For at least these reasons, claims 19-27 are believed to be allowable, and the Office is respectfully requested to withdraw the rejections of claims 19-27.

For at least the reasons presented herein, all pending claims are believed to be allowable over the prior art of record, and Applicants respectfully request all claim rejections be withdrawn, and all pending claims (claims 1, 3-6, 8-27) be allowed.

**Final Remarks.** Applicants hereby petitions/requests a one-month extension of time, with payment for such extension of time provided by the enclosed credit card payment form (PTO-2038). Should a different extension of time be deemed appropriate, Applicants hereby petition for such deemed extension of time. Applicants further authorize the charging of Deposit Account No. 501430 for any fees that may be due in connection with this paper (e.g., claim fees, extension of time fees).

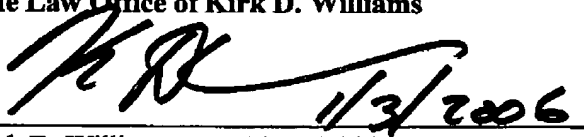
In view of the above remarks and for at least the reasons presented herein, all pending claims are believed to be allowable over all prior art of record, the application is considered in good and proper form for allowance, and the Office is respectfully requested to issue a timely Notice of allowance in this case. Applicant requests any and all rejections and/or objections be withdrawn. If, in the opinion of the Office, a telephone conference would expedite the prosecution of the subject application, the Office is invited to call the undersigned attorney, as Applicants are open to discussing, considering, and resolving issues.

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Respectfully submitted,  
The Law Office of Kirk D. Williams

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By

  
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